1
AUDIT SERVICES BRANCH REPORT

The Audit Committee recommends the adoption of the recommendation contained in the following report dated January 25, 2010, from the Director of Audit Services.

1. RECOMMENDATION

It is recommended that:
1. Council receive this report for information.

2. PURPOSE

This report provides an update on the activities of the Audit Services Branch since the last Audit Committee meeting.

3. BACKGROUND

On October 11, 2000, the Audit Committee approved the development of the Audit Services function through the report of the Chief Administrative Officer.

4. ANALYSIS AND OPTIONS

Audit Plan Execution

The Audit Services Branch has been actively executing the approved Three Year Audit Plan and other consulting engagements on *Attachment 1*. A summary of the activities since the previous Audit Committee meeting is outlined in *Attachment 2*.

Audit Reports Issued

The audit reports issued since the last Audit Committee meeting are:

- Outstanding Audit Recommendations Follow-up for February 2010 Audit Report (*Attachment 3*)
- Standby Pay Audit Report (*Attachment 4*)
- Water & Wastewater Capital Delivery Audit Report (*Attachment 5*)

5. FINANCIAL IMPLICATIONS

Audit Services Branch will manage its workload within the Audit Budget for 2010.

6. LOCAL MUNICIPAL IMPACT

Audit Services Branch will continue to provide audit services to the six local municipalities (Town of Aurora, Town of East Gwillimbury, Town of Georgina, Township of King, Town of Newmarket and the Town of Whitchurch-Stouffville) which have signed the memorandum of understanding. The costs of providing this audit service are recoverable from the local municipalities.

7. CONCLUSION

A follow up of outstanding audit recommendations for audit reports issued prior to December 31, 2009 indicates that management remains cognisant and active in implementing Audit Services recommendations.

Audit Services continues to work with Region management at all levels to provide them with independent, objective assurance and consulting activities designed to add value and improve the Region's operations. Audit Services does this by bringing a systematic, disciplined approach to evaluate and improve the effectiveness of risk management, control, and governance processes through guidance provided by the International Standards for the Professional Practise of Internal Auditing

Audit Services Branch 2009 - 2011 Plan

ATTACHMENT 1

Process / Project	Nature of Work	Year 2009	2010	2011	Total Hours Per Project	% of Total Hours per Year
Planning & Development						
Infrastructure Planning - Roads and Water&Watestewater	Audit	115	140		255	2.4%
Total Hours Spent in Department					255	2.4%
Finance & IT						
Capital Asset Management	Advisory	70			70	0.7%
Electronic Documents Management System	Advisory	35	35	35	105	1.0%
Computer Technology Review Committee	Advisory	60	60	60	180	1.7%
Capital Assets Management	Audit			120	120	1.1%
Revenue Sources	Audit		280		280	2.6%
Procurement Card	Audit		180		180	1.7%
Accounts Payable & Procurement - Substantive	Audit	560			560	5.2%
Efficiency & Effectiveness of Procurement & AP Process	Audit			560	560	5.2%
Treasury	Audit		140		140	1.3%
IT Services - Network Security Assessment	Audit	140			140	1.3%
IT Services - Leasing to Purchasing	Audit		140		140	1.3%
IT Services - Converged Network	Audit			140	140	1.3%
IT Services - FTP	Audit			140	140	1.3%
Total Hours Spent in Department					2,755	25.8%
Community & Health Services						
Long Term Care - Accreditation Process	Advisory			70	70	0.7%
Technology Support	Audit	140			140	1.3%
Housing Provider Subsidy Administration	Audit	140			140	1.3%
Rent Subsidy Program	Audit			140	140	1.3%
LTC Operations Facility Support & Res. Services	Audit		280		280	2.6%
Finance Assistance	Audit			140	140	1.3%
Employment Assistance	Audit		185		185	1.7%
EMS - Paramedic Operations	Audit	210			210	2.0%
Infectious Disease Control	Audit			140	140	1.3%
Total Hours Spent in Department					1,445	13.5%
Environmental Services						
Operations Maintenance & Monitoring	Audit		280		280	2.6%
Capital Planning & Delivery	Audit			140	140	1.3%
Regulatory Compliance	Audit	200			200	1.9%
Duffin Creek Plant Operating Agreement	Audit		185		185	1.7%
Dongara Central Compliance	Audit			140	140	1.3%
Water Rates Review	Consulting	140			140	1.3%
Total Hours Spent in Department					1,085	10.2%
Transportation Services						
Capital Planning & Delivery	Audit		280		280	2.6%
YRT - Cash Collection - Coin Contract	Audit		185		185	1.7%
YRT - Contracts - Conventional & Mobility	Audit			140	140	1.3%
YRT - 8300 Keele Operations Facility	Audit			140	140	1.3%
YRT - DPI & Byte Media Contract Review	Audit			140	140	1.3%
Operations & Safety	Audit	280			280	2.6%
Total Hours Spent in Department					1,165	10.9%
Corporate & Legal Services						
Records Information Management	Advisory	35	35	35	105	1.0%
Property Management	Audit	140			140	1.3%
Human Resources - Staffing,	Audit			115	115	1.1%
Court Administration - North	Audit	140			140	1.3%
Total Hours Spent in Department					500	4.7%
Chief Administrative Officer						
Business Continuity / Emergency Planning Comm.	Advisory	35	35	35	105	1.0%
Audit Plan Update	Consulting	-	-	70	70	0.7%
Outstanding Recommendation Follow-ups	Audit	140	140	140	420	3.9%
Management Requests	Various	420	420	420	1,260	11.8%
Forensic Reviews	Various	560	560	500	1,620	15.2%
Total Hours Spent in Department					3,475	32.5%
	Total Hours per Year	3,560	3,560	3,560	10,680	100.0%

ATTACHMENT 2

AUDIT SERVICES BRANCH ACTIVITIES

Project Name	Status
1. Standby Pay Audit Report	➢ Completed
2. Water & Wastewater Capital Delivery Audit Report	➢ Completed
3. Outstanding Audit Recommendations Follow-up November 2009	➢ Completed
4. Outstanding Audit Recommendations Follow-up February 2010	➢ Completed
5. Purchasing Card Implementation	➢ Completed
6. Accounts Payable & Procurement Audit	➢ In Progress
7. Various Investigations	➢ In Progress
8. Toronto Water Supply Agreement – Management Consulting	➢ In Progress
9. Wireless Security Audit	➢ In Progress
10. Roads – Operations & Safety Audit	➢ Planning
11. YRT – Bus Procurement	➢ Fairness Monitor – Completed
12. YRT – Street Furniture Procurement	➢ Fairness Monitor – In Progress
13. Environmental Services – TBM Procurement	➢ Fairness Monitor – Completed
14. C & HS – Major Mackenzie / Essex Drive Project	➢ Fairness Monitor – In Progress
15. YRT – Operations and Maintenance RFP	➢ Fairness Monitor – In Progress
16. ERP Group	➢ Advisory role
17. Corporate Technology Review Committee	➢ Advisory role
18. Electronic Document Management System	➢ Advisory role
19. Records and Information Management Group	➢ Advisory role
20. Program Reviews	➢ Member of Steering Committee
21. Capital Asset Management	➢ Member of Steering Committee
22. Outside Organizational work	➢ Vice Chair, Municipal Internal Auditors Association ➢ Board Member & Past Chair, Canadian Association of Local Government Auditors ➢ Board Members & Past Treasurer, Canadian Association of Local Government Auditors ➢ ALGA Peer Review Team Member

Outstanding Audit Recommendations Follow-up Audit Report

February 2010

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1.0 Management Summary

Audit Services has completed a follow up of outstanding audit recommendations. These recommendations are comprised of:

1. Audit recommendations that were noted as 'not yet completed' in our previous outstanding audit recommendations follow up audit report dated November 2009.
2. Any new audit report recommendations issued up to and including December 31, 2009.

There were 43 audit recommendations originally issued through the four audit reports currently on our list for follow up. Prior to this review, 38 audit recommendations, or 88% had been implemented. From the remaining five recommendations, two have been implemented. At December 31, 2009, 40 recommendations, or 93% of the original 43 recommendations issued have been implemented.

For a detailed summary of audit reports followed up and recommendations issued, completed and outstanding, please refer to section 4.0. Additional detail is available upon request from the Director, Audit Services.

2.0 Introduction

As part of our 2009 Audit Plan, which accommodates various types of audit projects, consulting engagements, and follow-up requests from the Audit Committee and Management, the Audit Services Branch performed a follow-up of outstanding audit recommendations. These recommendations included those noted as outstanding in our November 2009 audit recommendations follow-up audit report, and all new recommendations issued in audit reports up to and including December 31, 2009.

The Audit Plan, approved by York Region's (the Region's) Audit Committee, is developed annually by the Audit Services Branch using a Risk Assessment Methodology that helps to define the different risks associated with the various processes at the Region. It is one tool that Audit Services uses in assessing where best to allocate audit resources.

On a periodic basis, Audit Services updates the Regional Audit Committee and the Chief Administrative Officer (CAO) on the status of issued audit recommendations. To provide this update, Audit Services contacts Commissioners and Directors to confirm the status of the issued recommendation(s) relating to their area. In some cases, the status is further validated directly by Audit Services through discussions and / or detailed testing. This is an integral part of our audit process that allows us to confirm that the opportunities for improvement outlined in the audit report(s) have been implemented.

Department heads were e-mailed requests containing:

1. A summary of outstanding audit recommendation(s) for their area.
2. A request to provide a status update and a confirmation of the original due date for implementation of the recommendation, or a new anticipated implementation date if necessary.

Management Action Plans that detailed what was being done to implement the recommendation(s), was also requested.

Finally, an Executive Sign-off Form, to be signed by the Commissioner and Director responsible for the implementation of the recommendation(s), was also sent.

Audit reports issued after December 31, 2009 will be followed up in the future.

Additionally, at the February 14, 2008 Audit Committee meeting, management was requested to provide a report to Audit Committee for any outstanding audit recommendations that remain outstanding greater than a year. This will be done annually, with the next report due to Audit Committee in June 2010.

Audit Services is investigating automated solutions for audit recommendation tracking and follow-up, which we expect to complete by Q4 2009.

3.0 Objectives and Scope

The objective for this engagement was:

- To provide feedback to the York Region Audit Committee and CAO, as to the disposition of issued audit recommendations.

The audit scope to accomplish this objective was:

- All outstanding audit recommendations issued prior to December 31, 2009.

4.0 Detailed Observations and Recommendations

4.1 Detail Summary Statistics for Outstanding Audit Recommendations Followed Up

- Table A summarizes the outstanding audit recommendations followed up for this review.
- Table B is a mid-level summary of outstanding audit recommendations which were followed-up for this review.

TABLE A - Summary of Outstanding Audit Recommendations Follow-up as at December 31, 2010

Audit Report	Number of opportunities originally highlighted	Previously completed	Completed for this review	Not yet complete	% Not yet complete	Date of Audit Report	Date Reported to Audit Committee
Revenue Streams	18	17	1	0	0.0%	Apr-06	Jun-06
Finance - Payroll	6	5	0	1	16.7%	Oct-07	Nov-07
Fleet Audit - Corporate Level	8	6	0	2	25.0%	Apr-05	Jun-05
Property Services Branch - Lease Tracking	11	10	1	0	0.0%	Sep-05	Mar-06
Results for February 2010	**43**	**38**	**2**	**3**	**7.0%**		

TABLE B – Mid-level Summary of Outstanding Audit Recommendations as at December 31, 2010

Audit Report	Recommendation	Management response	Original due date	Current due date
Finance				
Finance – Payroll	TEAMS interface with Time & Labour, periodic password change requirements, continuing role out of Time & Labour to reap benefits of automation.	TEAMS integration with Time and Labour has been impacted with the reorganization of T&W into the two new departments of Environmental Services and Transportation Services. Each operates in TEAMS uniquely, with different schedules and rules. The interface for Transportation has been developed and is ready for testing. The scheduled implementation date is early Q2 2010. Once completed it will form the basis for the Environmental department which should also be implemented in Q2. ScheduleSoft being developed for EMS was put on hold in 2009. This was due to the reorganization of Community Health and Services. ScheduleSoft is now being remodeled to serve as the scheduling tool for Long Term Care with the ultimate goal of being interfaced to Time and Labour. The goal is to have this completed in Q3 2010.	Q1 2008	Q2 / Q3 2010
Fleet – Corporate	Develop and implement Corporate and Department level fleet policy and procedure manuals. Ownership of Corporate level to belong to Insurance Risk management. Ownership of Department level manual to belong to the fleet areas within the department.	In Q4 2009 the draft final of the Fleet policy was given to the CAO's office for Senior Management Team (SMT) review. Approval is anticipated for Q2 2010.	Q1 2005	Q2 2010
Fleet – Corporate	Periodic driver abstract collection.	The Motor Vehicle Records (MVR) procedures are included in the above mentioned policy and procedures. MVRs will be obtained according to procedures once SMT approval is obtained.	Q4 2005	Q2 2010

ATTACHMENT 4

York Region – Standby Pay Audit

April 2009

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1.0 Management Summary

We have completed a review of standby pay applications to ensure that they are valid, accurate and in compliance with the Standby Pay Policy. This included reviewing and evaluating the Standby Pay Policy, and reviewing individual employee applications for standby pay to ensure that calculations were correctly performed and were substantiated with appropriate documentation. Our audit was conducted in accordance with the *International Standards for the Professional Practice of Internal Auditing.*

We have concluded that except for Community and Health Services, overall documentation supporting hours on standby and calls received is not being summarized to enable verification that the number of hours and call-ins meet the eligibility criteria to qualify for standby pay. We did note several opportunities for improvement for management consideration including review of the Standby Pay Policy itself, and requiring monthly summary sheets to be completed by individuals which can be tallied at the end of the year to determine the standby pay entitlement.

The Audit Plan, approved by the Audit Committee, is developed annually by the Audit Services Department using a Risk Assessment Methodology that helps to define the different risks associated with the various processes here at the Region. It is one tool that Audit Services uses in assessing where best to locate audit resources.

Should the reader have any questions or require a more detailed understanding of the risk assessment and sampling decisions made during this review, please contact the Director, Audit Services.

Audit Services would like to thank Regional management and staff for their co-operation and assistance during the audit.

2.0 Introduction

The Standby Pay Policy was developed in 2003 to compensate non-unionized employees for being available and responding to issues during off-duty hours.

Standby pay is categorized into two tiers. Tier 1 applies to employees below the level of Director and requires an average of 10 days per month, and an average of at least 10 calls per month to qualify. Tier 2 also applies to employees below the Director level and requires an average of 4 days per month and an average of at least 4 calls per month to qualify. Those qualifying for Tier 1 receive 10 days pay, and Tier 2 qualifiers receive 5 days pay.

Standby pay applications are submitted to Human Resources Services – Compensation for processing by December of each calendar year. The standby pay period covers December 1 to November 30 of the following year.

Approximately $106,000 was paid to (non-unionized) employees for standby pay for 2008 in the Transportation, Environmental Services, Corporate Services and Community and Health Services branches.

3.0 Objectives and Scope

The objectives of the review included ensuring that:

- 2008 standby pay applications are valid and adequately supported;
- All required supporting documentation is submitted and retained and those receiving standby pay met either Tier 1 or Tier 2 requirements.

The objectives of the review were accomplished through:

- Review and evaluation of the corporate policy for standby pay;
- Obtaining and reviewing backup documentation supporting the standby pay application for each department/branch;
- Meetings and discussion with branch/department management as required.

4.0 Detailed Observations and Recommendations

4.1 Updated Policy not Approved by the CAO

Observation

Upon review of the Standby Pay Policy it was discovered that the policy was updated on November 16, 2007, but the last CAO approval date was December 9, 2003. Discussion with Corporate Continuous Improvement indicated that there has been some confusion corporately as to the process to be followed for administrative policy updates.

Recommendation

The Manager, Corporate Continuous Improvement should develop specific procedures to be followed to ensure that updates to administrative policies are consistently and appropriately handled.

Management Response

Corporate Continuous Improvement has facilitated a review of the processes for approval/sign-off, posting and document retention of Regional policies. Improvements include:

- Development of a high-level flow process that clarifies roles and responsibilities across the corporation. Completed August 2009
- Development of formal procedures within the Office of the CAO to ensure new policies & policy changes are reviewed and approved in a timely manner and accurate records are maintained. Completed September 2009
- Designation of the Program Manager, Strategic Initiatives as the key contact and liaison for all policy related matters.

Communications of high-level process and procedures through information sessions will be undertaken by November 30, 2009, and will be followed by a revamped corporate intranet site.

4.2 Standby Pay Policy Improvements

Observation

Review of the Standby Pay Policy revealed some opportunities to improve and clarify the policy.

a) The consequences of non-compliance were not stated in the policy,
b) The requirement to maintain monthly summary information (specifically number of hours and calls each month by individual) is not clearly stated in the policy, but is necessary to calculate eligibility for standby pay.
c) What specifically is required to be documented to support the number of calls on standby is not clearly stated.
d) There is no mention of electronic communication (i.e. Blackberry e-mail) as an alternative to a “call”. Clarification is needed as to whether responding to e-mails (via Blackberry) qualifies as a “call” while on standby.

e) There is no mention of the expectation that employees comply with the Code of Conduct during the hours that they are on standby.

Recommendation

The Standby Pay Policy should be reviewed and updated to clarify the above noted items.

Management Response

Management agrees with the audit recommendations. We will proceed to update the Standby Policy and implement the changes effective January 1, 2010.

4.3 Documentation

Observation

- Several branches were unable to provide documentation (schedules and/or call logs) summarized for the year to support the standby application that was submitted which indicated that the standby application was a "guess". Overall, calls received during the standby period were not tracked or documented at all, or were not documented in a manner which could be easily summarized to facilitate the standby pay "average call" calculation.

- One branch had no documentation or schedules because the employee who prepared the application was no longer with the Region.

- 2 branches provided documentation to support the number of calls received which when audited did not meet the eligibility requirements to receive standby pay.

Recommendation

- Department Heads should review supporting documentation prior to approving the Standby Pay application to ensure that employees are entitled as per the Standby Pay policy.
- The "Health Services – Managers on-call Summary" (see Appendix A – attached) should be renamed and used by all branches to record the information necessary to calculate eligibility for standby pay.

Management Response

York Region Transit:

YRT management agrees in principle with the recommendations made. The consistent use of schedules and the use of the proposed form is a positive step in our view. Implementation Q1 2010.

Property Services Branch:

1. Agree - Supporting documentation will be submitted for review prior to approving Standby Pay.
2. Agree- PSB will incorporate the information identified on the form into our current tracking tool. Q4/09

Environmental Services Branch:

Recommendation 1 – agreed, all supporting documentation will be reviewed to ensure entitlement as per the Standby Pay Policy effective immediately.

Recommendation 2 – The Operations, Maintenance and Monitoring branch of Environmental Services developed an excel spreadsheet for tracking the necessary information to calculate eligibility for standby pay. Management staff on standby are responsible to keep the spreadsheet up to date effective immediately.

Roads Branch:

In Roads Operations, we will implement the proposed form to assist in the effort to address and ensure documentation is completed in a manner to facilitate calculating eligibility for standby pay for the last quarter of 2009, we will also convert our current spreadsheet records to the new proposed format to reflect standby and calls reviewed for all of 2009 for the required year end reporting. Each of the Superintendants on Standby will complete the form moving forward in 2010.

4.4 Summarizing Monthly Information

Observation

Community and Health Services had well documented summary sheets to support individual claims for standby pay, however the information prepared by the individuals was not presented in a way to facilitate verification and entry into an annual summary spreadsheet by the administrative person who prepared the annual standby pay application. Consequently there were 2 errors made in the annual calculation of hours worked on weekends and another error where 16 hours was missed altogether. Neither error affected the individual’s eligibility for standby pay.

Recommendation

The “Health Services – Managers on-call Summary” monthly sheet should be revised to provide more detail as to the dates, days of the week, and the number of hours worked so that they can be easily checked for accuracy before being entered into the annual summary spreadsheet by the administrator.

Management Response

I agree that the "former Health Services" on call form be revised to provide more details as outlined in the recommendation below. The form was actually revised by my staff late December

2008 and rolled out to Community and Health Services staff participating in "on call schedules". The majority of staff were using the new form as of January 2009.

Original signed by **Joann Simmons** **Commissioner, Community and Health Services**	*Original signed by* **Paul Duggan** **Director, Audit Services**
Original signed by **Karen Close** **Director, Human Resources Services**	*Original signed by* **Jim Davidson** **Commissioner, Corporate Services**
Original signed by **Erin Mahoney** **Commissioner, Environmental Services**	*Original signed by* **Kathleen Llewellyn-Thomas** **Commissioner, Transportation Services**
Original signed by **Brett Bloxam** **Director, Operations Maintenance and Monitoring**	*Original signed by* **Barry Crowe** **Director, Property Services**
Original signed by **Paul Jankowski** **General Manager, Roads**	*Original signed by* **Marilyn Woolhead** **Director, Administration**

APPENDIX A

MONTHLY STANDBY/ON-CALL SUMMARY

Employee Name: ____
Department:____________________________
Branch/Division________________________

Month: ____

Note: List every day that you are on call (even if you receive no calls)
One month per sheet (ie. January)

Dates On Call	On Call Time:	# Hours on call	# of Calls Received	# of e-device responses*
EXAMPLE: Jan 1, 2009	00:00 - 23:59	24	10	2
EXAMPLE: Jan 6, 2009	16:30 - 23:59	7.5	0	1
Jan 7, 2009	00:00 - 08:30	8.5	0	0
		40	**10**	**3**
3.00			13	

*** attach a copy of all e-device responses required directly as a result of being on standby**

Employee Signature: _______________

Director Signature: _______________

York Region

Water & Wastewater Capital Delivery Audit Report

September 2009

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1.0 Management Summary

We have completed a review of the Regional Municipality of York's ("the Region's") Water & Wastewater Capital Delivery process. The focus of our review was to assess the effectiveness and efficiency of the Region's delivery of projects from planning to commission. This required interviews and reviewing documents in the Planning &Development Services, Environmental Services, Corporate Services and Finance. Our audit was conducted in accordance with the *International Standards for the Professional Practice of Internal Auditing.*

Based on the work performed the Region's established processes for the planning and delivery of water & wastewater capital projects are operating at a reasonable level of effectiveness and efficiency. However, in our review of the process which spanned a number of the Region's departments and branches, we noted internal control improvement opportunities and the addition of process steps that we believe would be of benefit to the overall planning, delivery, protection and reporting of water & waste water capital assets.

Some of the opportunities noted include:

- Capturing process flows to establish no unbroken lines of communication and information exchange between relevant parties.
- Formalizing roles between Planning & Development and Environmental Services for cross-functional activities.
- Formalizing the hand-off of project files from one project manager to another project manager.
- Project oversight for compliance to environmental and Health & Safety regulations
- Attendance at the Contractor-Constructor course offered by Health & Safety.
- Development of a lessons learned database.
- Complete the implementation of the vendor performance evaluation application.
- Finalizing the Finance draft policy and procedures for closing a project.
- Improving project status reports to Region management.
- Calibration of water modeling software.
- Consultant holdbacks for construction related activities.

We have provided detailed recommendations in the body of the report.

A draft copy of this report has been discussed with Planning & Development, Environmental Services, Finance and Corporate Services management. They have provided us with their comments and have agreed to take the necessary actions to implement the recommendations.

We would like to take the opportunity to express our appreciation to the Planning & Development, Environmental Services, Finance and Corporate Services staff involved at the Region for their cooperation and assistance in the completion of this audit.

2.0 Introduction

The success of the planning and delivery of water & wastewater infrastructure to the region's population involves the ongoing co-operation between Planning & Development, Environmental Services, Finance and Corporate Services. The process is, by its nature, very complex. In addition, some projects will take years to deliver. As a result, the link between the projected needs and the future delivery of services must be kept and continuity of process must be maintained through an overall well planned and structured process.

Activity to deliver water & wastewater infrastructure begins with the Official Plan. The Official Plan looks at where the region expects growth to happen 15-20 years into the future. The Plan takes into consideration a number of factors including: legislation, anticipated population growth, local municipality plans, zoning, and employment objectives.

The Official Plan drives the creation of the Region Master Plan. The Master Plan projects the growth of the region 30 years into the future and is updated every 5 years to encompass any changes or uncertainties. The Region's Master Plan analyzes transportation, water & wastewater and infrastructure maintenance costs. It drives the 10 & 5 year construction program. These plans determine priority projects (projects that support the Region as a whole) and strategic projects (area specific based on development).

These plans result in the Long-term Water Master Plan and Wastewater (Sewers) Master Plan and then finally Construction Plans. At this point, projects are transferred over to capital delivery personnel and take shape in the form of physical projects.

Typically, water & wastewater projects will follow three steps: conceptual planning, infrastructure design, and construction. Environmental Assessments and preliminary design concepts are explored during the first phase. A design is chosen and specifications are developed for the second phase. The specifications are used to create construction tenders for market. Construction bids are awarded and the final stage of construction commences. Upon completion of construction, the infrastructure is commissioned and transferred from the capital delivery process into operations. Capital Project Delivery (CPD) staff work with the Operations team to oversee the warranty aspects of the facility.

To help project manage the water & wastewater capital delivery process, a new Capital Delivery Process Manual (CDIP – Capital Delivery Improved Process) was developed to improve the project delivery process existing at that time and was put into effect September 2007. Its goal is to guide Capital Planning & Delivery Project Managers in the management of capital projects relating to water and wastewater treatment, supply, collection, distribution and storage. The intent is to achieve uniformity and consistency in the delivery of capital projects. CDIP provides a structured approach to systematically define the tasks required for consistent and efficient delivery of projects, and establishes accountability for managing key activities.

A new software application had also been recently introduced called Eclipse. This project portfolio management application assists mid-level management in keeping abreast of project status through ongoing reporting of costs, risks, issues and timelines. It allows for timely responses to critical project needs.

Some water and wastewater projects will, on occasion, be transferred to other project managers for completion or implementation. A process and structure for document collection, categorization, and retention is essential to ensure the flow of the project is captured and available should management need to establish a course of events. Project managers can take away important and vital information relating to a project if they are reassigned.

A project is considered substantially performed only after it is totally commissioned, is fit for use and meets the definition for substantial performance as defined in the Lien Act. Warrantees, unfinished work, and legal proceedings may keep the project open for budget purposes. Finance will continue to track the project until they are officially informed by Environmental Services of the project closing. A project may remain open for two years after substantial completion.

3.0 Objectives and Scope

The objectives and criteria of the audit engagement were as follows:

- Ensuring that policies and procedures are in place to minimize risk from the long term planning stage up to the commissioning of capital projects.
- Ensuring that appropriate documentation for project management is on file.

The procedures performed to meet the objectives included:

- Review of the capital planning and delivery process to ensure supported project decision making.
- Detailed testing of a sample of 5 capital projects during 2007.
- Interviews with appropriate personnel.
- Review of project files and other documentation as necessary.

<u>*Please note*</u>*: In September 2007 Environmental Services - Water & Wastewater Capital Delivery adopted new project management guidelines. Audit Services elected to detail test only projects that were commenced under these new procedures. There were four projects tested for startup documentation, and all related to water programs. There were no wastewater projects being delivered under the new project management guidelines. None of the projects reviewed had been completed and were in various stages of completion.*

4.0 Detailed Observations and Recommendations – Planning & Development

4.1 Planning & Development Services – Infrastructure Planning should finalize processes mapping relating to application processes

Observation

A process mapping project to document process flows relating to activities including developer requests for subdivisions, site plan applications, and major official plan applications was started and has not yet been complete. Its objective was to highlight the roles and responsibilities of applicable regional branches and departments, points where approvals were required and from whom, and timelines for application reviews and approvals.

These front-end processes have a direct impact on infrastructure planning for water and wastewater requirements within the Region. Without documented processes and assigned responsibilities there is an increased risk that not all the necessary parties will have input into the applications.

Recommendations

Planning & Development Services – Infrastructure Planning should complete the front-end process mapping project, and develop a method whereby the maintenance can be shared with the other associated parties.

This would help to ensure that all relevant parties and associated responsibilities continue to be included in application processing. Any changes to roles and responsibilities can be examined within the process maps and process changes made to ensure information and approval flows remain intact.

Management Response

Planning & Development Services agrees that the process mapping project for development application review should be completed. Planning & Development Services – Infrastructure Planning and the Environmental Services Department will complete the process mapping project by Q4, 2010.

4.2 Formalizing the roles & responsibilities relating to cross-functional activities between Planning & Development – Infrastructure Planning and Environmental Services – Planning & Capital Delivery Branches

Observation

Proposed roles and responsibilities relating to cross-functional activities between Planning & Development – Infrastructure Planning and Environmental Services – Planning & Capital Delivery have not been formalized.

In September 2006, as part of the final re-organization of the Water & Wastewater Planning group and the then Transportation & Works Water & Wastewater Technical Support group, a proposed high-level roles and responsibilities document was tabled by the Water & Wastewater planning group to identify a number of cross-functional activities. The document identified and proposed assignment of prime ownership for the following areas:

- Master Plan Updates – Annual Monitoring Report (Supply & Demand), Priority Analysis for 10-Year Capital Program
- Water & Wastewater Modelling
- Development Application Review
- Development Charges By-law Review
- Up-Front Financing Agreements
- Water Quality

Without a ratified agreement on the roles and responsibilities cross-functional activities there is an increased risk of duplication of activities and cessation of others.

Recommendations

Roles and responsibilities relating to cross-functional activities between Planning & Development – Infrastructure Planning and Environmental Services – Planning & Capital Delivery be formalized to help ensure duplication of activities is not occurring, and all activities deemed necessary are being performed.

Given the recent organization and staff changes, this would be an opportune time to address water & wastewater roles & responsibilities between departments.

Management Response

Management agrees that the water and wastewater roles and responsibilities between departments need to be addressed. However the roles and responsibilities document that was previously tabled is outdated and needs to be updated. There was substantial discussion in late 2008, which needs to be formally documented.

- Planning & Development – Infrastructure Planning and Environmental Services - Capital Planning and Delivery will work together to prepare a new roles and responsibilities document identifying cross-functional activities.
- Planning & Development Services will work together with Environmental Services to determine the roles and responsibilities for the cross-functional activities by Q4, 2010.

4.3 Calibration of water modelling software

Observation

Both water modelling applications may require calibration. The Region currently employs two different water modelling applications in its planning and delivery of water & wastewater infrastructure. MWH SOFT – Infowater is used for water, and Wallingford – Infoworks is employed for wastewater. The former was last calibrated in the late 1990s, the latter in 2004. Both models have been validated; however as per discussion with management, calibration should occur every five years.

Briefly, model calibration is the process of determining the model parameters and/or structure on the basis of measurement and priori knowledge. Validation testing is designed to confirm that the calibrated model is applicable over the limited range of conditions defined by the calibration and validation data sets.

Water modelling applications that are not periodically calibrated increase the risk of accumulating out of date and incorrect information. In turn, this could affect the ability of the model to accurately depict the present and forecast the future.

Recommendations

Planning & Capital Delivery management determine if both applications currently in use require calibration and ensure they are calibrated.

For the future, a formal calibration and validation schedule should be developed to help ensure the models are kept up-to-date and operating effectively. This schedule may also involve periodic input from Planning & Development – Water & Wastewater Planning relating to population growth, population density changes and land use changes. They should be included as part of the schedule when required.

Management Response

Management agrees with the recommendation.

- Planning & Development Services - Infrastructure Planning, and Environmental Services - Capital Planning & Delivery management will work together to determine if both applications currently in use require calibration and ensure they are calibrated.
- If needed, Infrastructure Planning and Capital Planning & Delivery management will initiate projects to calibrate the water and wastewater models which will be added to the ten year capital program for commencement in 2010, subject to budget approval by Council.
- Capital Planning & Delivery will be commencing a sewage flow monitoring project in the summer of 2010 to collect data, which will form the first part of the wastewater model calibration.
- Once the water and wastewater models are delivered by the Master Plan team, a joint working group between Capital Planning & Delivery and Infrastructure Planning will be formed to maintain and update the models as required.
- A calibration and validation schedule will be developed to help ensure the models are kept up-to-date and operating effectively.

4.4 Periodic review of the Partnership Memorandum for Planning Services between York Region and the Toronto and Lake Simcoe Conservation Authorities

Observation

The Partnership Memorandum for Planning and Services between York Region and Conservation Authorities, adopted in February 1999, may require updating.

The memorandum was created to address the transfer of the provincial plan review responsibilities in York Region, streamline the municipalities planning system where possible, and to assist the Region in making planning development decisions using the technical clearance expertise of the Conservation Authorities.

Periodical review of the memorandum avoids potential future issues relating to new, related legislation and new lines of responsibilities. It allows for all parties to remain clear on their roles or any changes that may occur that could change deliverables.

The memorandum is also the conduit from which the current Service Level Agreements and Fees Schedule between the Region and Conservation Authorities were created and evolved.

Recommendations

Planning & Development Services should lead an exercise to determine if an update to the memorandum between York Region and the Toronto and Lake Simcoe Conservation Authorities is necessary.

Management Response

The MOU between the Region and the Conservation Authorities (CAs) has served the Region well. As informal reviews have been ongoing through a regular monitoring process, it is time to move forward with revising the MOU to meet future needs. Planning staff agree that a review of the MOU between the Region and CAs is necessary and timely.

Staff has looked at the terms of the MOU and has also assessed the commenting process over the past year, which is almost complete. The MOU has been reviewed by Planning, in consultation with Environmental Services, Roads and Legal, to ensure that the MOU has been updated to reaffirm their partnership in commenting on development applications. The CAs will continue to assist the Region within their specified areas of expertise in plan review and technical clearance, as outlined within the document.

The revised MOU is now being reviewed by the Conservation Authorities executive committees, and pending any changes to the document by the CAs, the updated MOU is ready to be signed by their authorized representatives. The Planning Department will report to Council in September to outline the changes to the document, and seek authorization to execute the MOU by the Region.

Due date for the above is Q3 2009.

In conjunction with updating the MOU, Finance is currently in the process of reviewing the Region's contributions to the CAs through a separate process.

5.0 Detailed Observations and Recommendations – Environmental Services

5.1 Development of the Historical Information and Lessons Learned Database

Observation

Environmental Services – Capital Planning & Delivery has not created a Historical Information and Lessons Learned Database. As per the Water & Wastewater Capital Delivery Improved Process, the Project Manager is responsible for the completion of lessons learned for each of the four phases in the capital delivery process. The database is too served as a historical record which will assist in avoiding similar mistakes in future projects and capitalize on the things which worked well.

Recommendations

Environmental Services – Capital Planning & Delivery create and implement the Historical Information and Lessons Learned Database as soon as possible. This would allow for project lessons learned to be entered into the database as the project progresses, ensuring information is shared more quickly.

In addition, management should consider populating the database with past historical information and lessons learned to help ensure these are not lost with the introduction of the new process.

Management Response

Agreed. This requirement was included in the latest update of the Capital Delivery Improvement Process (CDIP) and has been partially addressed. Collection of data has started on an individual project basis. Given that this update is recent, few, if any, projects have been closed out since the rollout.

A refined centralized database will be developed utilizing existing software or a new application. Anticipated due date: Q3 2011. This may require new software which will take time to investigate, procure, develop and implement.

5.2 Review of Project Manager Binder and Project Review Log

Observation

Project Management Binders and Project Review Logs are not being kept by Project Managers as per the Capital Delivery Improved Process Guidelines. As per the Guidelines (adopted in September 2007), the Project Manager is to establish a Project Management Binder at the start of a project that contains a predetermined selection of key project related documents. In addition, a Project Review Log is to be established by the Project Manager that records and tracks issues and their status.

A review of binders and logs for four capital projects started after the September 2007 adoption date of these requirements revealed the following:

- There was one binder containing a few of the required documents in no particular order. Some of the documents had been printed the day of the meeting between the Project Manager and Audit Services staff.
- There were no binders available for three projects.

The Guidelines were created and maintained to help the Project Manager deliver capital assets using a pre-approved methodology. Adherence to that methodology is crucial if project supporting documentation is to be complete and accurate. Not adhering to the methodology increases the risks of:

- Key documents being misplaced as new project managers can be assigned to the project before it is completed.
- The inability to locate key documents for litigation purposes.

Recommendations

Environmental Services – Capital Planning & Delivery management periodically formally review Project Manager project files to ensure consistent adherence to the Guidelines.

Management Response

Agreed. A tracking protocol will be developed, possibly for use with Eclipse. Additional resources to formally track project delivery in accordance with CDIP will be included in the 2011 budget submission in Q4 2010.

In the future project binder documents will be developed and updated within Eclipse and stored electronically in eDOCs. No paper binders will be used.

5.3 Human resources monitoring opportunity for improvement

Observation

The current human resources planning tool, known as the Division Quarterly Report, used in Environmental Services - Capital Planning & Delivery does not appear to adequately meet the needs of the Branch any longer. This is due to the level of staffing, the available skill sets and number of projects to be delivered.

The current software being used is a MS Excel spreadsheet. It is manually intensive with respect to data input and can only summarize individual workloads at a high level; it does not provide an interactive, up-to-date, actual view of resource activity. Use of the spreadsheet also requires past experience to estimate time and human resource requirements as it cannot incorporate standards to be used as defaults setting.

The spreadsheet does not take into consideration statutory holidays or earned vacation days. A Division Quarterly Report for 2009 has not yet been prepared.

Eclipse, a project portfolio management application being implemented in Environmental Services - Capital Planning & Delivery, will provide the ability to view where resources are allocated, however it will not facilitate resource planning. Neither Eclipse nor the MS Excel spreadsheet highlight individual staff member skill sets, potentially useful information when assigning staff to specific projects and for staff development. This will become increasingly important as 20% of the current work force in Environmental Services - Capital Planning & Delivery will be retiring in the next 5 to 6 years.

Recommendations

Environmental Services - Capital Planning & Delivery management should consider reviewing scheduling software currently employed in the Region to determine if there may be a more useful human resource allocation application available to them.

If not available, management should consider making themselves aware of current resource applications in the market and whether there is a benefit to be garnered in employing a more robust and sophisticated resource planning application.

Management Response

CP&D management staff will explore available software within the region and externally, as well as continue to develop resource forecasting requirements. Anticipated due date: Q1 2011.

5.4 Eclipse Project Portfolio Management Software

Observation

Eclipse is a web-based project portfolio management software being implemented as part of the Capital Delivery Improved Process (CDIP) by Environmental Services - Capital Planning & Delivery. A review of the planning, purchase and delivery of this application noted the following issues:

- The Project Charter for CDIP Automation, the Eclipse Project Scope Statement and the Eclipse Software Purchase Agreement were not signed by Environmental Services management. The Software Purchase Agreement was not signed by the vendor.

  Without management signoff, these documents remain in draft and final work is not authorized to proceed. Without vendor sign off we cannot determine is all deliverables were agreed upon.
- The Project Scope Statement highlights anticipated risks relating to the implementation of Eclipse, however there are no risk mitigation plans.

  Without risk mitigation plans management does not have a plan in place to either avoid or lessen any risks that might delay or stop software implementation or user acceptance.
- The new due date for Eclipse implementation is December 2009. The original due date for the implementation of Eclipse was December 2008. As per discussion with Environmental Services - Capital Planning & Delivery management, the largest obstacle to project manager acceptance of Eclipse is the availability of financial information downloaded from PeopleSoft. There was no representative from PeopleSoft assigned to the Eclipse Working group.

One of the risks identified users not accepting or using Eclipse. One possible solution to this risk could have been identification of the importance to the Project Managers of financial information being available in Eclipse. Plans could have included assigning a representative from PeopleSoft to eliminate or reduce the risk.

- There is no deliverable in the scope statement that requires a formal report to management post implementation.

  Without a post implementation report, management will not know the status of the implementation, the objectives achieved and any remaining work that needs to be performed.
- The purchase of Eclipse was approved by the Director. The cost of the application was $65,000 which required the Commissioner's approval.

Recommendations

Environmental Services - Capital Planning & Delivery management should ensure that:

- The Project Charter, Project Scope Statement and Purchase Agreement are properly signed. The Purchase Agreement should also be signed by the vendor.

  In the future this will help to ensure that management has reviewed and approved work.
- In the future, the Project Scope Statement should include risk mitigation plans for any noted risks factors potentially impacting on application delivery.

  Consideration should be given to any potential associated risks and plans to mitigate their impact.
- Future projects include the requirement for a post implementation report to summarize what deliverables were achieved, potential future functionality or deliverables, and lessons learned from the implementation that could be applicable to future projects of this nature. The Region is constantly upgrading and automating processes.
- In the future, purchase order requests must comply with the Region's Purchasing By-law.

Management Response

- Agreed. Done.
- Agreed. Has been noted for future projects to include a more complete project scope statement.
- Agreed. A post implementation report will be prepared for future projects of this nature.
- Agreed. The Commissioner has been informed.

5.5 Keeping Information on CapWorks current

Observation

CapWorks, an online database that stores key water & wastewater capital project information, is not being kept current. During the course of our review we noted missing program year information, incorrect project manager assignment and missing contract information. It is the responsibility of the Project Managers to ensure project information on CapWorks is kept current.

CapWorks contains approximately 7 to 8 years history relating to capital projects and has never been purged of old dated information i.e. completed projects.

The Project Charter for Capital Delivery Improved Process (CDIP) Automation is to utilize CapWorks for input of project information, this information to be used by multiple programs. As per the Eclipse Project Scope Statement, CapWorks will potentially be integrated with Eclipse.

Recommendations

The information contained within CapWorks should be reviewed to ensure it is current, complete and relevant. A process to maintain CapWorks information should be developed and implemented to help ensure information being provided by CapWorks to other applications is current.

Management Response

Agreed. CapWorks will be phased out by Environmental Services and be replaced by Eclispe in Q3 2010. Until that time CapWorks will be maintained for Environmental Services information pushed out to the website.

5.6 Implementation of formal contractor performance evaluation process

Observation

Despite spending an estimated $160,706 on a formal contractor performance evaluation system, Environmental Services - Capital Planning & Delivery does not yet perform formal contractor performance evaluations.

In early 2006, a contract was awarded through Transportation & Works for Consulting Services for the Development of a Contractors Performance Evaluation System at a cost of $137,356 net of taxes, subsequently increased to $160,706 net of taxes. The new process and application was to be in place and fully implemented by June 1, 2006.

An MS Excel based contractor performance evaluation application was delivered together with a procedures manual by the consultant in March 2008. However, the scope of the project changed to require a web-based application. To accomplish this new requirement Finance - Information Technology (IT) was approached to deliver this new feature through PeopleSoft on a charge back basis for the work required. To-date, IT is in the process of mapping out original and new evaluation criteria and will also be developing a demo for project managers, training requirements for all users, and the reporting required based on the evaluation criteria collected. The new delivery date is April 2010.

It does not appear that a formal project management process has been followed as we were not able to obtain a project charter or scope document for this program.

Contractor performance evaluations provide valuable feedback to vendors relating to the values held by the Region and how the Region expects business to be conducted.

It provides the Region the opportunity for risk mitigation and vendor development.

Recommendations

The contractor performance evaluation process and application should be implemented as soon as possible. A scope document that includes agreed upon deliverables and evaluation criteria should be prepared and formally finalized by Environmental Services - Capital Planning & Delivery management before any more work proceeds.

Vendor performance evaluations will provide valuable information relating to vendor practises and where vendors can improve. Vendor development allows for increased competition within the market.

Environmental Services - Capital Planning & Delivery management should consider co-ordinating the vendor evaluation application with other departments who may make use of the system.

For future projects of this type, Environmental Services - Capital Planning & Delivery management should follow more formal project management process to help ensure the project is delivered on-time and within budget.

Management Response

Agreed. Contractor performance evaluations are currently being rolled out to industry on several pilot projects prior to full implementation in Q4 2010.

CPES is a joint effort between Environmental Services, Transportation Services, and a number of other department branches within the Region. This may impact on the timing of the full implementation schedule.

5.7 Formalizing the transfer of project working paper files to newly assigned project managers

Observation

Project managers assigned to a project that is a work in process are not required to formally accept the working paper files associated with their new project responsibility. Environmental Services - Capital Planning & Delivery projects can typically require a number of years to complete. As a result, during the life of a project more than one project manager may be assigned to a project before it is completed. This could lead to lack of file continuity and consistency. Project manager changes are usually due to movement into a new project requiring their skill set, or into other areas of the organization.

Working paper files provide the Region formal records of the work performed to deliver a project. Project files can be required for a number of reasons; to allow the new project manager to assess the condition of the active project, to clarify contract conditions, build specifications, warranty claims, or legal action.

As a best practise it is not uncommon for professional associations to require a member to thoroughly review the files of another member if those files will be used to accomplish a task. This helps to ensure that the work was performed and documented to a set standard.

Recommendations

When a new project manager assumes the responsibility of continuing the delivery of a work in process project, they should be required to review the state of the current files to become familiar with the project's history, and have any deficiencies corrected by the outgoing project manager. This would also help to ensure that project files are complete and consistent prior to files being sent for storage once a project has been delivered.

The transferring of the project files between project managers should be formally documented in the Capital Delivery Improved Process.

Management Response

Agreed. Protocol will be developed and incorporated into CDIP Q2 2010.

5.8 Project files requiring records retention offsite

Observation

A number of capital delivery project working paper files have been identified as closed and require being sent to offsite storage. Some of the project files date back to Infrastructure Design & Construction.

Eight of eleven project files listed as being closed and ready to be off-sited have been located. Three files have not yet been located. Of the eight located, two files may still be active and not ready for off-site storage.

Prior to being sent to storage, the files should be reviewed and logged as to what documents are being stored. Not all of the project files have been keyed into Versatile.

Recommendations

Environmental Services - Capital Planning & Delivery management should ensure that the files listed as closed and ready to be offsite are:

- Inactive and qualify for storage offsite.
- Logged into Versatile.
- Reviewed for content and records retention applicability.
- Contain all the necessary project files.

Environmental Services - Capital Planning & Delivery management should also enlisted help from Corporate Services – Records Information and Management if necessary.

Management Response

Records Retention has been contacted for file retention requirements. Items will be resolved by Q1 2010.

5.9 Avoiding premature release of contractor holdbacks relating to water & wastewater projects

Observation

There were two instances in January 2009 where holdbacks were not deducted from a Progress Payment Certificate (PPC) in 2006 and were inappropriately released with a payment to the vendor. The cheques released had a value of $104,455 and $1,880 respectively. The discovery was made when the final PPCs for release of the holdbacks were sent to the Legal Department for processing and a shortfall in monies owed to the vendor was noted in Accounts Payable.

Early release of the holdback, without the necessary documentation being collected by the Legal Department to decide whether the holdback should be released, exposes the Region to being liable in the event that there were liens in place by subcontractors.

Release of the maintenance holdback reduces the Region's leverage in ensuring that projects are completed to our satisfaction.

Recommendations

To help ensure that contractor holdbacks are not inadvertently released early, Finance – Financial Services and Environmental Services - Capital Planning & Delivery management should reiterate the importance of ensuring that PPCs with holdbacks are clearly marked "**To Be Sent to the Legal Department**".

This would help to ensure the Region maintains their leverage in satisfactorily completed projects.

Management Response

Environmental Services – Capital Planning & Delivery has reiterated to the Business Strategies Branch to ensure processing of Progress Payment Certificates are routed through Legal prior to processing payment for all construction contracts. Done.

Financial Services – Agreed. All payment certificate forms should be updated by operating departments to say **To Be Sent to the Legal Department** to ensure that they are sent to Legal.

Financial Services management will update process flow diagrams in this area and ensure that staff is communicated with regards to the change in the form.

Financial Services will communicate the request for the form change in the next week with full compliance required end of Q2 2009.

5.10 Collection of water & wastewater project start documents and renewal of insurance certificates

Observation

Project start documents were reviewed for five water & wastewater projects involving nine separate construction contracts. The results of our review are below:

1. We could not obtain three project commencement letters issued to contractors relating to the project number 73020 – King City & PDS Forcemain. Project commencement letters to contractors provides evidence of official project start date. This start date marks the period from which projects are due and affects insurance coverage.
2. Commencement of construction advertising to residents for contentious or high profile projects is not part of the Water & Wastewater Capital Delivery Improved Process (CDIP). Communication to the public for these projects can help to ease tensions caused by lack of information.
3. Two of nine insurance certificates were expired. The expired certificates related to projects T-07-59 and T-06-52. A lapse in insurance coverage leaves the Region exposed to potential liability should an otherwise covered accident occur.
4. Five of five completed projects from which we require insurance certificates have not submitted the required documentation after numerous requests. This insurance covers the capital asset for a period of six years after total completion. As per discussion with Finance – Policy Risk & Treasury, most vendors do not want to provide insurance coverage after contract expiration. It would be difficult to collect on any insurance claim after project completion.

Recommendations

1. Environmental Services – Capital Planning & Delivery management ensure that the commencement letters for the above identified projects are located or reproduced for records retention. This will help ensure project documentation is complete.
2. Environmental Services – Capital Planning & Delivery management consider the addition of advertising to area residents when high profile and contentious projects commence construction to the CDIP program. This should also include guidelines as to when a project would be deemed to fit this requirement.
3. Insurance Risk management ensure that the two expired insurance certificates identified above are renewed as soon as possible to minimize any potential lapse of insurance coverage risks.
4. Due to the difficulty being experienced in collecting insurance certificates, and the potential of not being able to collect on any claim, Finance – Policy Risk & Treasury explore the possibility of modifying how to obtain required insurance coverage. One possible solution identified by the Manager - Insurance Risk is the Owner Controlled Insurance Program (OCIP). This program should also be explored as not only a solution, but as a possible means by which the Region can save on insurance costs associated with capital projects as a whole in the future.

Given that water & wastewater projects can cover a number of years, there may also be a benefit in approaching longer term project contractors and assuming insurance requirements today, in exchange for a partial reimbursement on the original quoted contract costs.

Management Response

Environmental Services – Capital Planning & Delivery

1. The "Notice to Commence" letter template will be updated to include Manager, Engineering and Legal Services as a CC. This will add a "double check" to this key aspect of the process. Due date: Q3 2009.
2. This recommendation will be added to the CDIP process. Due date: Q1 2010.

Finance – Policy Risk & Treasury

1. The two expired insurance certificates have been collected:
   07-59 - H2 Ontario Inc. - new certificate expires Jan. 27, 2010
   06-52 - ASCO Construction – new certificate expires Jan. 31, 2010
2. OCIPs are now utilized for capital projects over $10M.

5.11 Scheduling additional Contractor Constructor Training seminars offered by Corporate Services - Health & Safety for Environmental Services - Capital Planning & Delivery staff

Observation

During our review of Health & Safety related processes we noted that up to 55% of the present staff of Environmental Services - Capital Planning & Delivery engineering staff may not have attended the Contractor Constructor Training seminar originally presented by Corporate Services – Health & Safety. This seminar was offered by Health & Safety between July 2007 and May 2008. The last seminar attended by Environmental Services - Capital Planning & Delivery staff was February 2008. At that time there were 20 staff registered under Water & Wastewater and 14 attended the seminar, or 70%. A comparison of the attendee listing provided by Corporate Services – Health & Safety Branch to the present day engineering staff of Environmental Services - Capital Planning & Delivery revealed that 55% may not have attended the seminar. The present staff reviewed for compliance included senior managers, managers, project managers / specialists / coordinators / technologists.

The seminar was offered by Corporate Services – Health & Safety and was made available through the Corporate Learning System. Its target audience was staff with any responsibility in the contract and construction process. The course raised awareness of roles and responsibilities, hazard identification and recognition, compliance with health & safety legislation and the Region's legal liability in construction projects.

This course is one of many 'due diligence' practises employed by the Region.

Recommendations

Environmental Services - Capital Planning & Delivery management should determine if the seminar is relevant for Environmental Services - Capital Planning & Delivery staff who did not have the opportunity to attend.

If the seminar content is relevant, Corporate Services – Health & Safety should be approached and requested to schedule one or more seminars for staff.

This would help to ensure that health & safety awareness is raised while visiting construction sites to help limit any potential liabilities for the Region.

Management Response

Environmental Services – Capital Planning & Delivery

Agreed. Done.

Corporate Services – Human Resources Services (Occupation Health & Safety)

Health and Safety has arranged two sessions of the Contractor-Constructor course on July 9 and August 6, 2009. The courses have been posted in the Corporate Learning Registration System.

At a meeting on May 26, 2009 with Environmental Services Capital Planning and Delivery management we identified some staff that had not received the Contractor-Constructor course offered by York Region. We also identified approximately 20 staff that did attend an external Contractor-Constructor course. The internal course is specific to the York Region Contractor-Constructor Policy and Guideline, and an email to Capital Delivery management was sent on June 10th, 2009 recommending that staff attend our course, and training dates, an overview of course content and a promotional poster were attached.

5.12 Corporate records and records retention compliance

Observation

Environmental Services - Capital Planning & Delivery project files have not yet been assessed by Records Retention as it relates to retention period legislation and assignment of classification codes in eDocs. As per discussion with Environmental Services - Capital Planning & Delivery management, project files are not necessarily structured in a way that facilitates records retention as per corporate guidelines and is a frustrating exercise.

Recommendations

Corporate Services – Corporate Records & information Management should review and evaluate the documents being produced and stored in Environmental Services - Capital Planning & Delivery for compliance to the Records Information Management By-law.

A chart or guideline should be provided to the branch that assigns priority to documents and files. Training should also be provided if necessary, to help ensure compliance to the by-law, and Municipal Act.

Management Response

Corporate Services - Corporate Records & Information Management

Corporate Services - Corporate Records & Information Management agrees to review the organization and classification of project documents being produced and stored in Environmental Services - Capital Planning & Delivery (CP&D) for compliance to the Records Retention By-law.

Any retention changes that may be required as a result of the review will be noted for the next update of the Records Retention By-law. Classification changes, e.g. new codes can be rolled out as required.

Corporate Records & Information Management has incorporated this review into the workplan for the RIA, with a projected completion date of Q3 2010.

Completion of this review depends on prioritization of the various requirements for both departments. Prioritization of the workplan is negotiated by the Manager, Office Services (Environmental Services and Transportation Services Departments) and the Supervisor, Corporate Records and Information, Clerk's Office, Corporate Services Department. The Annual Information Management Snapshot identified RIM recommendations for priority work to be done, including the implementation of the Departmental reorganization into Versatile, the Region's file management software. This project is scheduled to be completed by Q2 2010. The Audit recommendations would be scheduled to follow completion of this project.

5.13 Recording and communicating minutes for quarterly Region and Local Municipalities meetings

Observation

Meeting minutes are not recorded and communicated for quarterly meetings between Region and Local Municipality Engineering Groups.

These meetings provide for channels of communication between the Region and Local Municipalities. Information relating to projects and changes to current projects are often shared, together with other relevant water and wastewater information.

Not issuing minutes from theses meetings increases the risk of a misunderstanding of some of the information that is shared.

Recommendations

Environmental Services – Capital Planning & Delivery should ensure that minutes for the quarterly meetings between the Region and Local Municipalities are recorded and communicated to the necessary parties. Minutes should be approved at subsequent meetings. A more formal structured approach (issuing agenda, participants present etc) should also be adopted. This would help reduce the risk of potential misunderstandings and allow for clarification of information shared.

Management Response

Quarterly meetings involve all Environmental Services and Transportation Services business areas/branches. Meetings are chaired by Transportation and Environmental Services' Commissioners. CP&D support a more formal structure for regular meetings with the Local Municipalities. We will communicate the need for this initiative to meeting chairs.

5.14 Project oversight for compliance to Environmental and Health & Safety regulations

Observation

Project oversight for the health and safety of workers contains gaps that may leave the Region open to liability should an accident occur. The following gaps were noted in the present oversight structure:

- The Region does not have a formal process to use historical contractor health & safety data from which to pre qualify vendors (contractors). A contractor performance evaluation application is presently in pilot stage with a roll out scheduled for Q4 2010.
- Attendance by the Region's Health & Safety auditors at project sites is primarily driven by the work being performed and for follow-up on past noted issues. Resource constraints do not allow for a fuller coverage of all projects that may require more regular ongoing visits. In any case, the audits performed by the Region's Health & Safety auditors should not replace nor be associated with consultant deliverables.
- Site consultants, hired either by the Region or the contractor, may or may not report health and safety violations to the contractor. A case in point was noted on March 28, 2008 where the Region's Health & Safety auditor noted and reported on workers working above exposed rebar. On April 8, 2008 there continued to be exposed rebar with workers working above. The Consultant's report for April 8, 2008 indicated no such issues with respect to exposed rebar. Emails between the Project Manager and Consultant on April 11, 2008 indicated that the issue had not yet been fully resolved. Over two weeks to resolve this type of violation appears to be too lengthy a time for resolution.

Discussion with Environmental Services – Capital Planning & Delivery indicated that, in an attempt to be more proactive in reducing potential liability, they are currently:

1. Developing a simplified process flow chart to advise and educate consultants on the nature and range of responsibilities on York Region project sites regarding the environment and health & safety issues.
2. Proposing project dedicated specialist construction and inspection staff to help ensure ongoing environmental and health and safety compliance.

Recommendations

Environmental Services – Capital Planning & Delivery should:

1. Prepare and issue the educational materials to consultants as soon as possible.
2. Prepare a business case for dedicated specialists indicating the costs and benefits to reassign resources and / or hire additional resources. The business case should consider:
   a. The magnitude of the problem.
   b. Show how dedicated specialist construction administrative and inspection staff assigned to project sites would help ensure compliance to applicable environmental and health & safety regulatory requirements.
   c. Indicate what documents would be produced, archived and retrievable to help establish that compliance was or was not being met, should the necessity arise.
3. Consider a pilot program whereby a dedicated specialist is assigned to a project. The program can be assessed for value at the end of the program.

Management Response

1. A simplified flow chart is being prepared and will be issued along with RFPs, Construction Contracts and Consultant Agreements. On ongoing projects, project managers will meet and communicate the procedure to the consultants. This will be completed by Q2 2010.
2. The businesses cases have being prepared and submitted for review by Senior Management and Council as part of the 2010 budget cycle. Some modification may be required.
3. In our opinion a pilot is not needed as we know additional staff will produce the desired results based on similar functions being performed by the Construction Administration crew which is resource constrained.

6.0 Detailed Observations and Recommendations – Finance

6.1 Clarifying information and maintenance for the Capital Project Status Report

Observation

The Capital Project Status Report, prepared quarterly for Regional Council, Finance and Water & Wastewater management, presents project actual and budget year-to-date and overall project financial information. Our review of the mid year report for 2008 revealed a number of improvement opportunities to present information more clearly and accurately. These opportunities are presented below as critical and optional:

Critical

- There are two overall project budget numbers listed: Total Project Budget and Revised Project Forecast. When calculating the Percentage Dollars Spent on the project, the calculation uses the former and not the latter, even if there is a revised amount. The percentage dollars spent on the project is not recalculated using the revised amount. This could result in the percentage figure being misstated for a project, and lead to incorrect assumptions by management and Regional Council.
- Revised Project Forecast – This amount is either the actual revised forecast if there was one, or if none is provided by the project manager, then it defaults to show the lesser of the Total Project Budget or Inception to Date Actual. Forcing entries into columns requires the reader to interpret whether the number is legitimate and what it actually represents – is it an actual revised budget amount or a forced entry and there was no revised budget? As per discussion with management, this column is rarely updated.

Other matters

- The report may present too much information. Project to date and year-to-date information could be separated and presented on two separate reports. Information overload is counter productive for decision makers as it distracts the reader from the specific information they require.
- Manual entries are required from project managers for some information on this report. The timeline to supply these manual entries is short, approximately a week. The report is made available to Water & Wastewater by Finance Business Planning & Budgets once current financial figures from PeopleSoft are downloaded into the spreadsheet. Project Managers are then required to update the Revised Project Forecast, Milestone Reached (0-7), Status / Comments and Project on Schedule (Y/N). The short time line could result in information not being fully updated due to project managers attending to more urgent project related issues. This results in report inaccuracies and incompleteness.
- Project on Schedule (Y/N) – This information requires clarification. If a project commences a year or more later than stipulated in the Water & Wastewater 10 Year Capital Plan, then the due date will usually be pushed out. The project delivery date may be later than originally planned; however the project execution could be on schedule given the new revised timelines.

- Variance Explanation – There are no formal guidelines as to what the Project Manager should be commenting on, how long the comments should be, and at what point does a project require a comment(s). We noted a number of comments not relating to variances.
- The status report for Water contained two hidden unreconciled amounts relating to year-to-date actual and non-tax revenue. The amounts were relatively small in comparison to the report as a whole; however there should be no hidden, unreconciled amounts to aid balancing.

Recommendations

Environmental Services - Capital Planning & Delivery and Finance - Business Planning & Budgets management should review the information presented on the Capital Project Status Report to:

Critical items – management should ensure these are corrected:

- Potentially eliminate one budget column and provide current information only. If not possible, ensure the percentage calculation is representative of the revised budget amount.
- Use the revised budget amount column when there are revised budget amounts. Otherwise leave the column empty. This will help to allow for a cleaner presentation and reduce extraneous information.

Other matters – management should consider:

- Creating two specialized reports and increasing the focus on the information at hand to minimize the potential of information overload.
- Explore the possibility of allowing project managers more time to input their information, or obtaining the information provided by another application i.e. Eclipse.
- Define the project start / end dates on the report, or information on how the project date is determined for clarity.
- Provide project managers with formal guidelines as to what to comment on, and when comments are required. This will help focus attention on when comments need to be provided.
- Eliminate hidden unreconciled amounts. Management should be confident that all column and row formulas function appropriately, and numbers are accurate and complete. Unreconciled amounts should be unhidden, explained and reconciled to PeopleSoft.

Management Response

At this time, management does not agree with the recommendation presented as the Capital Project Status Report serves a purpose in line with the Region's current policy of obtaining current year approval for Budget commitments. However, as the Region is moving towards full implementation of the Total Project Budget Authority Approach for the 2010 and 2011 Budgets, the Capital Project Status Report will be revisited and revised to reflect this new focus on total project expenditures rather than the current approach to obtaining approval for "in year" expenditure.

On reviewing audit's observations, it is important that these observations require clarification as the Capital Project Status report was designed to meet Corporate needs. For the two observations deemed critical by audit:

In line with our current policy of obtaining Council approval for current year cash requirements, the focus of this Capital Project Status report has been on the columns F onwards – specifically milestones, Approved Annual Budget and Year End Forecast (Gross). These are the columns used in addition to all current year requirements that provide information to management and to council on the status of all active capital projects. As the focus of the budget will move towards a total project focus, we will be revisiting this report and revising where necessary so that it will be in line with our new budgeting approach.

Management has set a target date of June 2010 to revise the Capital Project Status report. This target may change if a review of the 2010 budget process indicates that further budget changes are required that will impact capital reporting.

Other matters & recommendations provided by audit will be taken into consideration when reviewing and revising the Capital Project Status Report to accommodate the Total Project Budget Authority concept being implemented in Budget years 2010 and 2011.

6.2 Finalizing the draft Capital Budget Policy

Observation

The Region currently does not have a formal capital project closing policy. Finance – Business Planning & Budgets has been working on developing a Capital Budget Policy since 2007. The draft policy addresses topics including capital monitoring and closing procedures. The draft also creates or formalizes reporting and processes including:

- Quarterly Capital Status Reporting to determine if projects are complete, on schedule or no longer required.
- Formalized Department Review Process – to recommend a capital project for closure.
- Project Completion Report – a summary of the delivery of the project, expectations versus outcomes, cost versus budget with explanations, and issues outstanding and construction obstacles.
- Obtaining Authorization for Closure Process
- Annual Inactive Capital Projects Audit
- Projects with Pending Litigation
- Reports to be prepared for Regional Council

The policy also assigns responsibilities to various Department and Branch Heads.

Recommendations

Finance – Business Planning & Budgets continues to develop the draft policy, obtaining input from affect parties relating to capital project delivery, with the objective of formalizing the policy as soon as possible.

Management Response

Management agrees with this finding. A Capital Project Closure Policy was submitted and presented to the Senior Management Team on June 23, 2009. This policy was approved. Further steps towards the implementation of this policy are ongoing with formal implementation in Q4 2009.

7.0 Detailed Observations and Recommendations – Corporate Services - Legal Branch

7.1 Creating a Holdback Policy for Construction and Construction Related Activities

Observation

The Region does not currently have a policy to guide the general use of holdbacks in Region contracts relating to construction and construction related activities.

Holdbacks can offer a layer of protection to the Region in certain circumstances, i.e. sub contractors not being paid by prime contractors.

Mandatory holdbacks for construction and construction related activities are stipulated in the 2005 amendment to the Ontario Construction Lien Act. The number of parties to whom the lien remedy was made available was broadened to include construction related activities (i.e. the services of architects and engineers). Construction projects for planned improvements that have not yet commenced can also be subject to a lien.

There is an administrative process attached to this mandatory holdback requirement. In the past, the risk associated with not keeping a holdback for design consultants was deemed sufficiently low by management such that holdbacks were not requested. However, this is more of a broad brush approach rather than a specific exercise on a case by case basis.

In June 2006, a presentation was made to Regional management by the Legal Branch to highlight the potential liability to the Region resulting from not retaining holdbacks as per the Act. In essence, the Region could be:

- Held liable for payment to subcontractors on a project in the value of 10% of the contract price, or for the entire lien claim.
- Held liable for breach of trust by subcontractors who cannot collect from prime contractors.

Recommendations

Corporate Service – Legal Services Branch create a policy relating to the general use of holdbacks on construction and construction related projects. The policy should take into consideration the administrative process required under the Act versus the benefits (risk mitigation) received by the Region.

One potential method to address this balance is to require a project by project decision as to whether a holdback is necessary. Examples of how this decision could be guided include:

- The dollar value of the applicable contract versus the overall project cost.
- A set predetermined dollar amount for which a holdback is required.
- An assessment of the work involved and an estimation of the level of risk.

This will help to ensure that holdbacks are taken when necessary, and help to ensure the Region's exposure remains low.

Management Response

The Legal Services Branch is in agreement with the proposed recommendation and, in collaboration with the CAO's Office, can create a draft policy relating to the general use of holdbacks, to be presented to Senior Management by June, 2010.

Original signed by	*Original signed by*
Erin Mahoney	**Daniel Kostopoulos**
Commissioner, Environmental Services	**Director, Capital Planning & Delivery**
Original signed by	*Original signed by*
Jim Davidson	**Joy Hulton**
Commissioner, Corporate Services	**Regional Solicitor**
Original signed by	*Original signed by*
Lloyd Russell	**Kelly Strueby**
Commissioner, Finance	**Director, Business Planning & Budget**
Original signed by	*Original signed by*
Bryan Tuckey	**Paul Duggan**
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